2002 Spokane NWS Office Fire Weather Annual Operating Plan

National Weather Service 2601 North Rambo Rd. Spokane, Washington 99224--9164

Spokane Weather Forecast Office

Location

The Fire Weather Program is located at the National Weather

Service Office in Spekers

Service Office in Spokane.

Hours Office hours will be as follows:

Early Apr. - Late June Mon.-Fri. 8:00 a.m. - 4:00 p.m Late June - Early Nov. Daily 6:30 a.m. - 4:30 p.m.

• Fire Weather (509) 244-5031 **Phone Numbers**

• Public (509) 244-6395

• FAX (509) 244-0554

Staff Name Position

John Livingston Meteorologist in Charge

Gary Bennett Fire Weather Program Leader

Communications All forecasts and spot forecasts are input into AWIPS (Advanced

Weather Integrated Processing System), WIMS, and on

Spokane's Internet home page. Users who do not have access to

WIMS, or Internet can still have forecasts faxed to them.

Internet Address http://www.wrh.noaa.gov/Spokane/fire.htm

http://www.wrh.noaa.gov/Spokane

Forecast District

The Spokane Weather Forecast Office has weather forecast responsibility for a large portion of protected lands in eastern Washington. Exceptions are the Blue Mountains area, the Yakama Indian Nation lands, the DOE Hanford Site, and Southeast Department of Natural Resources (DNR) land. These protected lands are now the forecast responsibility of the Pendleton Weather Forecast Office.

Spokane's area of responsibility for Eastern Washington is now divided into six (6) districts for fire weather forecasting. In addition, these forecast districts are further sub-divided into ten (10) fire weather zones. See the map for general locations of districts and zones for eastern Washington. The weather zones are comprised of fire danger stations with similar weather and similar trends in weather changes.

Spokane also, has forecast responsibility for the central and northern Idaho Panhandle. This district has one (1) zone covering the Idaho Panhandle National Forests, Idaho State Lands, and Coeur d'Alene Indian Agency lands.

Forecast Services

Pre-suppression Forecast

Issuance of pre-suppression forecasts are seasonal. Routine issuance of the first weekday, morning and afternoon forecasts begins sometime in the spring. Routine issuance of the morning and afternoon forecasts seven days a week normally begins in late June continuing through late October or early November. Specific start and stop dates are coordinated with user agencies. Morning forecasts will be available at 08:30 a.m., while afternoon forecasts will be available at 3:30 p.m.

Fire Weather Watches and Red Flag Warnings

General Fire Weather Watch and Red Flag Warning criteria continues to be under review. Until formal changes have been agreed upon by the Land Management agencies and the National Weather Service we will continue with the present criteria. Red Flag criteria for eastern Washington are as follows

- Dry lightning and thunderstorms producing little or no precipitation (less than .20 of an inch).
- Any lightning and thunderstorms (wet or dry) following an extended dry period.

Forecast Services

- Sustained surface winds exceeding a 10 minute average of 15 mph and accompanied by:
- Relative humidity of 15% or less in the Basin and <25% in the mountains and <20% in the lower valley zones. Must be verified by 2 RAWS sites.
- Any combination of low relative humidity, strong and gusty winds, and a high level Haines Index of 5 or 6.

The issuance of Red Flag Warnings will take into account fuel conditions, and will be coordinated with user agencies and other applicable weather forecast offices.

Spot Forecasts

Official spot forecasts will be prepared and disseminated by the duty forecaster. When a request for an official spot forecast comes into the office, all forecasters at WFO Spokane are qualified to prepare, issue, and disseminate spot forecasts. Spot forecasts, therefore, may be requested at anytime, 24 hours a day.

IMETS (Incident Meteorologists)

Spokane Fire Weather Office will have a minimum of two certified IMETS on staff with at least one available at all times during the high summer fire season.

TRANSPORT AND STABILITY FORECASTS

Due to a mandate to control air quality in "Designated Areas" surrounding Spokane, transport and stability forecasts will be provided for the area during the fire season. Forecasts will consist of an estimate of air mass stability, mixing height, and winds aloft Bellow 7,000 feet. A forecast will be included with both the morning and afternoon pre-suppression forecasts as indicated above.

Non- Forecast Services

There are several duties that fall into the non-forecast services including, but not limited to teaching assignments, customer meetings, customer consultations, preparation of annual reports, preparation of annual operating plans, program management, research and in-house training of personnel.

There is a need for advanced notice for teaching assignments, customer meetings and consultations. The NWS-NWSEO Collective Bargaining Agreement provides rules for scheduling of bargaining unit employees. NWS management has limitations regarding modification of the work schedule after it has become "fixed" without paying overtime.

All requests for teaching assignments, customers meetings and consultations will be honored provided they are scheduled more than three weeks ahead of time, and they do not conflict with other Fire Weather commitments. NWS Spokane will make every effort to fulfill requests for teaching assignments, customer meetings and consultations that are scheduled with less than three weeks lead time, or conflict with other Fire Weather commitments. Shifts will be scheduled to complete the Annual Operating Plan and the Annual Report. Program management, research and training time will be provided to ALL employees based on needs of the office.

<u>Fire Weather Program Leader</u> - The WFO Spokane Fire Weather Program Leader is Gary Bennett. His primary focus will be customer outreach, training, program development, IMET dispatches, and fire weather operational shifts.

<u>Meeting Proficiency and Currency Standards</u> - All forecasters will complete required proficiency prior to working alone on any real time Fire Weather products and services.

Agencies Served

Land management agencies served by the Spokane Fire Weather Office include:

USFS.... Colville NF

Wenatchee NF Okanogan NF Idaho Panhandle NF

BLM.... Spokane District

BIA.... Colville Indian Agency

Spokane Indian Agency Coeur d' Alene Indian Agency

NWR... Turnbull National Wildlife Refuge

Columbia National Wildlife Refuge Priest River National Wildlife Refuge

Washington DNR... Northeast Area

Resource Protection Division

Idaho... Department of State Lands

Other Public Agencies... Coulee Dam National Recreation Area

Spokane Geographical Area Descriptions

Geographical area descriptions (districts) have changed beginning this year (2002) across eastern Washington. The Spokane weather office now has forecasts responsibility for the mountains and valley areas of northern and central eastern Washington and the northern and central Idaho Panhandle. The Pendleton weather office assumes responsibility for the southern areas of eastern Washington.

The Spokane Fire Weather Office has weather forecast responsibility for the protected lands in the northern and central part of eastern Washington. Exceptions are the Blue Mountains area, the Yakama Indian Reservation, and the Southeast Department of Natural Resources (DNR) protected lands. Forecasts for these areas are now handled out of the Pendleton Weather Forecast Office (see zone descriptions below).

Eastern Washington is now divided into six districts for fire weather forecasting. In addition, these forecast districts are further sub-divided into ten fire weather zones. See the map for general locations of districts and zones for eastern Washington. The fire weather zones are comprised of fire danger stations with similar weather and similar trends in weather changes.

South Central District:

This new district now consists of Zone 676 lower elevations and Zone 680 higher elevations. Zone boundaries have changed for zone 680 and valley zone 676 is a new zone. The south central district covers those areas of the southern Washington Cascades east slopes north of the Yakama Indian Reservation to Mission Ridge. The district boundary also runs west to east from the Cascade crest to Interstate 82. This includes the Naches and Cle Elum Ranger Districts of the Wenatchee National Forest. This district has pronounced climate differences, from the marine air influence near the Cascade crest, to the dry arid climate of the valleys. This district has a relatively low frequency of lightning, and averages about 10 storm-days per season from June through September.

Central District:

This district has virtually no changes for 2002. District boundaries and zones remain similar to last year with only exception being the North Cascades National Park and Lake Chelan National Recreation Area east of the Cascade crest. This area is now under the Seattle forecast office. Zone 662, (a new zone) was created for that portion of the park and recreation area. Zone 677 lower elevations and Zone 682 higher elevations remain the same. This district extends from Mission Ridge north to the Sawtooth Ridge, and from the Cascade crest east to the Columbia River. It includes the northern part of the Wenatchee NF. Lightning frequency averages around 18 storm-days per season. The summer climate is similar to the South Central District, but winds tend to be stronger and more persistent, and day to day weather changes are more pronounced. This district contains some of the highest fire hazard areas in the Pacific Northwest.

Spokane Geographical Area Descriptions (cont)

Northern District:

A zone was added to this district for 2002, but the boundaries remain the same. The new zone is 687, which becomes the Okanogan Highland zone. Zone 684 lower elevations and zone 685 higher elevations of the North Cascades' east slopes remain the same. This district extends across the north part of eastern Washington from the Cascade crest to the Kettle River Ranger on the east. It includes the Okanogan NF, the Republic Ranger district of the Colville NF, land under the protection of Northeast Department of Natural Resources, and the western and central parts of the Colville Indian Agency. The marine influence is minimal in this district compared to the south central and central districts due to its more continental location. Winds are generally lighter than central and south central districts. Lightning activity though is greater, averaging about 35 storm-days per season.

Northeast District:

No new changes to this zone for 2002. Zone 686. The northeast district extends from Kettle River to the Idaho border, and south to the vicinity of Spokane. It covers the remainder of the Colville NF and Indian Agency, as well as lands under the Northeast DNR. This district is normally more moist than the other districts since it extends into the western foothills of the Rocky Mountains. The southern portion around Spokane is the drier, windier section of this district. Lightning frequency is the greatest of any of the districts averaging 40 storm-days per season.

Northern Columbia Basin District:

Zone 673. This district was narrowed for 2002. The Pendleton Weather Forecast Office will now have responsibility for all SE Department of Natural Resources lands, Yakama IA land, and DOE Hanford. The southern district boundary is I-90 for that part of the Yakima Firing Center in Kittitas County then follows county lines west to east across Grant, Adams, and Whitman Counties. The western part of the district boundary is the Columbia River at the Grant County line. The northern boundary is the same as previous years following the Columbia River to the eastern Ferry County then south across the northeast part of Lincoln County to I-2 near Davenport then east to the Spokane County line. Fuels in this district consist of

mainly grass and sage. The district includes the Waterville Plateau which contains low ridges and coulees'. Most of the district is at fairly low elevations between 900 and 3,000 ft...with the exception being Badger Mountain near Waterville at 4,221 feet. Due to the relatively low elevations and locations, this is the warmest and driest district. Winds in some areas can be very strong. Lightning activity is the least of the districts, averaging about 6 storm-days per season.

Northern and Central Idaho Panhandle District:

No change to this district for 2002. Northern and Central Idaho Panhandle Zone 101 - Northern and Central Idaho Panhandle. This zone includes...Idaho Panhandle National Forests. Coeur d'Alene Indian Agency lands, and Idaho State protected lands in the following counties: Boundary, Bonner, Kootenai, Benewah, Shoshone, and the northern part of Latah county, where a part of the St. Joe District resides. Zone 101 is broken into three (3) separate zones the Northern zone, Central zone and Southern zone. Idaho Panhandle Zone 101 - Formerly zones 101 and part of zone 102 previously handled by the Missoula Fire Weather Office.

Spokane Fire Weather Zone Map

